



April 21, 2009

Charles L.A. Terreni
Chief Clerk and Administrator
South Carolina Public Service Commission
Post Office Drawer 11649
Columbia, South Carolina 29211

Re: Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.
Power Plant Performance Report
Docket No. 2006-224-E

Dear Mr. Terreni:

Enclosed is the Power Plant Performance Report for Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. for the month of March 2009.

Sincerely,

Len S. Anthony (by dhs)
Len S. Anthony
General Counsel
Progress Energy Carolinas, Inc.

LSA/dhs
Enclosures
45612

c: John Flitter (ORS)

March 2009

The following units had no off-line outages during the month of March:

Brunswick Unit 1

Harris Unit 1

Robinson Unit 2

Roxboro Unit 3

Roxboro Unit 4

Brunswick Unit 2

Full Scheduled Outage

- A. Duration: The unit was taken out of service at 1:37 on February 28, and remained offline for the remainder of the month. The unit was offline for 743 hours for the month of March.
- B. Cause: Scheduled Refueling Outage
- C. Explanation: The unit was taken out of service for a scheduled refueling outage. In addition to refueling, required maintenance and inspections are being carried out during this outage.
- D. Corrective Action: Planned outage activities were in progress at the end of March.

Mayo Unit 1

Full Scheduled Outage

- A. Duration: The unit was taken out of service at 17:50 on March 6, and remained offline for the remainder of the month. The unit was offline for a duration of 605 hours and 10 minutes during the month of March.
- B. Cause: Scheduled Boiler Inspection and Installation of Environmental Modifications
- C. Explanation: The unit was taken out of service for a planned boiler inspection and maintenance. Additionally, installation of the flue gas desulfurization system is being conducted during this outage.
- D. Corrective Action: Planned maintenance and outage activities were in progress at the end of March.

Roxboro Unit 2

Full Forced Outage

- A. Duration: The unit was taken out of service at 15:34 on March 7, and was returned to service at 4:30 on March 9, a duration of 35 hours and 56 minutes.
- B. Cause: Waterwall Tube Leak
- C. Explanation: The unit was taken out of service to investigate and repair a tube leak in the waterwall section of the boiler.
- D. Corrective Action: Corrective maintenance was performed to repair the waterwall tube leak, and the unit was returned to service.

Full Forced Outage

- A. Duration: The unit was taken out of service at 22:42 on March 14, and was returned to service at 18:10 on March 16, a duration of 43 hours and 28 minutes.
- B. Cause: Boiler Reheater Tube Leak
- C. Explanation: The unit was taken out of service to investigate and repair a tube leak in the reheater section of the boiler.
- D. Corrective Action: Corrective maintenance was performed to repair the tube leak, and the unit was returned to service.

Full Forced Outage

- A. Duration: The unit was taken out of service at 23:06 on March 27, and was returned to service at 16:29 on March 30, a duration of 65 hours and 23 minutes.
- B. Cause: Waterwall Tube Leak
- C. Explanation: The unit was taken out of service to investigate and repair a tube leak in the waterwall section of the boiler.
- D. Corrective Action: Corrective maintenance was performed to repair the tube leak, and the unit was returned to service.

	Month of March 2009		Twelve Month Summary		See Notes*
MDC	938 MW		938 MW		1
Period Hours	743 HOURS		8,760 HOURS		
Net Generation	706,650 MWH		7,437,336 MWH		2
Capacity Factor	101.39 %		90.51 %		
Equivalent Availability	99.07 %		88.59 %		
Output Factor	101.39 %		101.11 %		
Heat Rate	10,338 BTU/KWH		10,375 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	767,831	9.34	3
Partial Scheduled	6,503	0.93	58,437	0.71	4
Full Forced	0	0.00	93,206	1.13	5
Partial Forced	0	0.00	20,596	0.25	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	696,934		8,216,880		8

* See 'Notes for Nuclear Units' filed with the January 2009 report.

** Gross of Power Agency

	Month of March 2009		Twelve Month Summary		See Notes*
MDC	920 MW		933 MW		1
Period Hours	743 HOURS		8,760 HOURS		
Net Generation	-3,057 MWH		7,145,586 MWH		2
Capacity Factor	0.00 %		87.45 %		
Equivalent Availability	0.00 %		86.96 %		
Output Factor	0.00 %		99.47 %		
Heat Rate	0 BTU/KWH		10,612 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	683,560	100.00	704,152	8.62	3
Partial Scheduled	0	0.00	37,894	0.46	4
Full Forced	0	0.00	274,292	3.36	5
Partial Forced	0	0.00	63,967	0.78	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	683,560		8,170,890		8

* See 'Notes for Nuclear Units' filed with the January 2009 report.

** Gross of Power Agency

	Month of March 2009		Twelve Month Summary		See Notes*
MDC	900 MW		900 MW		1
Period Hours	743 HOURS		8,760 HOURS		
Net Generation	688,165 MWH		7,807,826 MWH		2
Capacity Factor	102.91 %		99.03 %		
Equivalent Availability	98.94 %		97.00 %		
Output Factor	102.91 %		101.93 %		
Heat Rate	10,684 BTU/KWH		10,770 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
	-----	-----	-----	-----	
Full Scheduled	0	0.00	0	0.00	3
Partial Scheduled	7,059	1.06	7,080	0.09	4
Full Forced	0	0.00	224,235	2.84	5
Partial Forced	0	0.00	8,939	0.11	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	668,700		7,884,000		8

* See 'Notes for Nuclear Units' filed with the January 2009 report.

** Gross of Power Agency

	Month of March 2009		Twelve Month Summary		See Notes*
MDC	710 MW		710 MW		1
Period Hours	743 HOURS		8,760 HOURS		
Net Generation	566,438 MWH		5,430,582 MWH		2
Capacity Factor	107.38 %		87.31 %		
Equivalent Availability	100.00 %		83.36 %		
Output Factor	107.38 %		103.96 %		
Heat Rate	10,458 BTU/KWH		10,755 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	748,860	12.04	3
Partial Scheduled	0	0.00	35,620	0.57	4
Full Forced	0	0.00	247,080	3.97	5
Partial Forced	0	0.00	3,512	0.06	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	527,530		6,219,600		8

* See 'Notes for Nuclear Units' filed with the January 2009 report.

	Month of March 2009		Twelve Month Summary		See Notes*
MDC	742 MW		742 MW		1
Period Hours	743 HOURS		8,760 HOURS		
Net Generation	84,875 MWH		3,924,461 MWH		2
Capacity Factor	15.40 %		60.38 %		
Equivalent Availability	18.47 %		90.37 %		
Output Factor	82.99 %		65.85 %		
Heat Rate	10,249 BTU/KWH		10,680 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	449,034	81.45	493,888	7.60	3
Partial Scheduled	458	0.08	55,655	0.86	4
Full Forced	0	0.00	46,474	0.71	5
Partial Forced	0	0.00	29,799	0.46	6
Economic Dispatch	16,939	3.07	1,949,643	29.99	7
Possible MWH	551,306		6,499,920		8

* See 'Notes for Fossil Units' filed with the January 2009 report.

** Gross of Power Agency

	Month of March 2009		Twelve Month Summary		See Notes*
MDC	662 MW		669 MW		1
Period Hours	743 HOURS		8,760 HOURS		
Net Generation	341,612 MWH		4,484,901 MWH		2
Capacity Factor	69.45 %		76.56 %		
Equivalent Availability	77.33 %		89.51 %		
Output Factor	87.61 %		85.24 %		
Heat Rate	8,858 BTU/KWH		8,989 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
	-----	-----	-----	-----	
Full Scheduled	0	0.00	339,292	5.79	3
Partial Scheduled	1,119	0.23	35,186	0.60	4
Full Forced	95,846	19.49	194,191	3.31	5
Partial Forced	14,558	2.96	45,243	0.77	6
Economic Dispatch	38,731	7.87	759,715	12.97	7
Possible MWH	491,866		5,858,250		8

* See 'Notes for Fossil Units' filed with the January 2009 report.

	Month of March 2009		Twelve Month Summary		See Notes*
MDC	695 MW		703 MW		1
Period Hours	743 HOURS		8,760 HOURS		
Net Generation	371,671 MWH		4,123,045 MWH		2
Capacity Factor	71.98 %		67.00 %		
Equivalent Availability	99.86 %		90.66 %		
Output Factor	71.98 %		71.58 %		
Heat Rate	10,258 BTU/KWH		10,986 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
	-----	-----	-----	-----	
Full Scheduled	0	0.00	377,669	6.14	3
Partial Scheduled	0	0.00	95,253	1.55	4
Full Forced	0	0.00	11,996	0.19	5
Partial Forced	748	0.14	90,678	1.47	6
Economic Dispatch	143,966	27.88	1,455,570	23.65	7
Possible MWH	516,385		6,153,900		8

* See 'Notes for Fossil Units' filed with the January 2009 report.

	Month of March 2009		Twelve Month Summary		See Notes*
MDC	698 MW		698 MW		1
Period Hours	743 HOURS		8,760 HOURS		
Net Generation	389,423 MWH		4,387,761 MWH		2
Capacity Factor	75.09 %		71.76 %		
Equivalent Availability	99.92 %		97.60 %		
Output Factor	75.09 %		73.91 %		
Heat Rate	10,842 BTU/KWH		10,579 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	60,866	1.00	3
Partial Scheduled	0	0.00	21,964	0.36	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	433	0.08	63,966	1.05	6
Economic Dispatch	128,758	24.83	1,579,923	25.84	7
Possible MWH	518,614		6,114,480		8

* See 'Notes for Fossil Units' filed with the January 2009 report.

** Gross of Power Agency

Plant	Unit	Current MW Rating	January 2008 - December 2008	March 2009	January 2009 - March 2009
Asheville	1	191	67.84	75.62	80.01
Asheville	2	185	64.83	68.67	69.52
Cape Fear	5	144	69.98	70.81	77.35
Cape Fear	6	172	61.62	64.02	61.89
Lee	1	74	62.88	44.70	46.63
Lee	2	77	50.49	38.06	41.65
Lee	3	246	38.21	64.54	61.43
Mayo	1	742	62.59	15.40	55.78
Robinson	1	174	65.88	64.64	66.61
Roxboro	1	369	69.79	90.46	88.55
Roxboro	2	662	78.24	69.45	79.94
Roxboro	3	695	66.00	71.98	73.93
Roxboro	4	698	70.32	75.09	76.16
Sutton	1	93	46.46	67.83	46.24
Sutton	2	104	55.49	62.54	46.97
Sutton	3	403	56.73	65.56	50.65
Weatherspoon	1	48	42.83	12.49	15.14
Weatherspoon	2	49	41.04	16.05	23.72
Weatherspoon	3	75	56.58	37.14	30.84
Fossil System Total		5,201	64.48	61.21	67.03
Brunswick	1	938	85.33	101.39	101.56
Brunswick	2	920	95.43	0.00	65.32
Harris	1	900	98.94	102.91	103.28
Robinson Nuclear	2	710	87.02	107.38	107.55
Nuclear System Total		3,468	91.90	76.00	93.62
Total System		8,669	75.45	67.12	77.67

Amended SC Fuel Rule
Related to Nuclear Operations

There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation system if the utility achieved a net capacity factor of $\geq 92.5\%$ during the 12 month period under review. For the test period April 1, 2008 through March 31, 2009, actual period to date performance is summarized below:

Period to Date: April 1, 2008 to March 31, 2009

Nuclear System Capacity Factor Calculation (Based on net generation)

A.. Nuclear system actual generation for SCPSC test period	A = 27,821,330 MWH
B. Total number of hours during SCPSC test period	B = 8,760 hours
C. Nuclear system MDC during SCPSC test period (see page 2)	C = 3,485 MW for 2008 3,468 MW for 2009
D. Reasonable nuclear system reductions (see page 2)	D = 3,259,139 MWH
A. SC Fuel Case nuclear system capacity factor: $[(A + D) / (B + C)] * 100 = 101.9\%$	

NOTE:

If Line Item E $> 92.5\%$, presumption of utility's minimum cost of operation.

If Line Item E $< 92.5\%$, utility has burden of proof of reasonable operations.

Note: Brunswick 2 MDC value was decreased by 17 MW, effective 12/31/08, primarily reflecting the impact of changes associated with calculation methods (NERC requires annual evaluation of environmental and operational parameters; former process used three to five-year average), environmental monitoring and compliance, and the impact of equipment degradation.

Amended SC Fuel Rule
Nuclear System Capacity Factor Calculation
Reasonable Nuclear System Reductions
Period to Date: April 1, 2008 to March 31, 2009

Nuclear Unit Name and Designation	BNP Unit # 1	BNP Unit # 2	HNP Unit # 1	RNP Unit # 2	Nuclear System
Unit MDC (April - December 2008)	938 MW	937 MW	900 MW	710 MW	3,485 MW
Unit MDC (January - February 2009)	938 MW	920 MW	900 MW	710 MW	3,468 MW
Reasonable refueling outage time (MWH)	644,015	704,153	0	732,791	
Reasonable maintenance, repair, and equipment replacement outage time (MWH)	241,928	287,000	229,209	271,491	
Reasonable coast down power reductions (MWH)	0	5,239	0	9,720	
Reasonable power ascension power reductions (MWH)	42,784	31,466	0	21,070	
Prudent NRC required testing outages (MWH)	8,857	23,271	0	0	
SCPSC identified outages not directly under utility control (MWH)	0	0	0	0	
Acts of Nature reductions (MWH)	0	6,145	0	0	
Reasonable nuclear reduction due to low system load (MWH)	0	0	0	0	
Unit total excluded MWH	937,584	1,057,274	229,209	1,035,072	
Total reasonable outage time exclusions [carry to Page 1, Line D]					3,259,139